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- 77. (New) A vaccine comprising at least a portion of a CMV genome that can generate an immune response in a mammal, wherein the CMV genome or portion thereof is attenuated through inhibition of expression or activity of US28 and/or a/US28 homolog.
- 78. (New) The vaccine of claim 77, further comprising a pharmaceutically acceptable carrier.
- 79. (New) The vaccine of claim 78, wherein the carrier is an adjuvant that stimulates a T-cell response in the mammal.
- 80. (New) The vaccine of claim 79, wherein the carrier is Freund's adjuvant or Ribi adjuvant.
- 81. (New) The vaccine of claim 77, wherein the mammal is a human and the CMV genome is HCMV.
- 82. (New) The vaccine of claim 81, wherein at least a segment of the HCMV genome encoding US28, UL33 and/or UL78 has been inactivated.
- 83. (New) The vaccine of claim 82, wherein the segment of the HCMV genome encoding US28, UL33 and/or UL/78 has been deleted.
- 84. (New) The vaccine of claim 82, further comprising a pharmaceutically acceptable carrier.
- 85. (New) The vaccine of claim 84, wherein the carrier is an adjuvant that stimulates a T-cell response in humans.
- 86. (New) The vaccine of claim 84, wherein at least a portion of the HCMV genome encoding US28 has been inactivated.
- 87. (New) The vaccine of claim 86, wherein the segment of the HCMV genome encoding US28 has been deleted.

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88. (New) The vaccine of claim 84, wherein at least a portion of the HCMV genome encoding human UL33 has been inactivated.

- 89. (New) The vaccine of claim 88, wherein the segment of the HCMV genome encoding human UL 33 has been deleted.
- 90. (New) The vaccine of claim 84, wherein at least a portion of the HCMV genome encoding human UL78 has been inactivated.
- 91. (New) The vaccine of claim 90, wherein the segment of the HCMV genome encoding human UL78 has been deleted.
- 92. (New) The vaccine of claim 77, wherein the mammal is rhesus monkey and the CMV genome is rhCMV.
- 93. (New) The vaccine of claim 92, wherein at least a portion of the rhCMV genome encoding rhUS28.1, rhUS28.2, rhUS28.3, rhUS28.4, rhUS28.5, rhUL33, and/or rhUL78 has been inactivated.
- 94. (New) The vaccine of claim 93, wherein the segment of the rhCMV genome encoding rhUS28.1, rhUS28.2, rhUS28.3, rhUS28.4, rhUS28.5, rhUL33, and/or rhUL78 has been deleted.
- 95. (New) The vaccine of claim 93, further comprising a pharmaceutically acceptable carrier.
- 96. (New) The vaccine of claim 95, wherein the carrier is an adjuvant that stimulates a T-cell response in rhesus monkey.
- 97. (New) The vaccine of claim 95, wherein at least a portion of the rhCMV genome encoding rhUS28.1 has been inactivated.

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- 98. (New) The vaccine of claim 97, wherein the segment of the rhCMV genome encoding rhUS28.1 has been deleted.
- 99. (New) The vaccine of claim 95, wherein at least a portion of the rhCMV genome encoding rhUS28.2 has been inactivated.
- 100. (New) The vaccine of claim 99, wherein the segment of the rhCMV genome encoding rhUS28.2 has been deleted.
- 101. (New) The vaccine of claim 95, wherein at least a portion of the rhCMV genome encoding rhUS28.3 has been inactivated.
- 102. (New) The vaccine of claim/101, wherein the segment of the rhCMV genome encoding rhUS28.3 has been deleted.
- 103. (New) The vaccine of claim 95, wherein at least a portion of the rhCMV genome encoding rhUS28.4 has been inactivated.
- 104. (New) The vaccine of claim 103, wherein the segment of the rhCMV genome encoding rhUS28.4 has been deleted.
- 105. (New) The vaccine of claim 95, wherein at least a portion of the rhCMV genome encoding rhUS28.5 has/been inactivated.
- 106. (New)/The vaccine of claim 105, wherein the segment of the rhCMV genome encoding rhUS28.5 has been deleted.
- 107. (New) The vaccine of claim 95, wherein at least a portion of the rhCMV genome encoding rhUL33 has been inactivated.
- 108/ (New) The vaccine of claim 107, wherein the segment of the rhCMV genome encoding rhUL33 has been deleted.